AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A microplasma jet generator, driven with a VHF ~~power supply~~ electric current, for generating an inductively coupled microplasma jet, the microplasma jet generator comprising a substrate, a micro-antenna disposed on the substrate, and a discharge tube located close to the micro-antenna, wherein the micro-antenna has a flat meandering shape with plural turns extending in alternating directions.

2. (Original) The microplasma jet generator according to claim 1, wherein the micro-antenna is located close to a microplasma jet-generating end portion of the substrate.

3. (Currently Amended) The microplasma jet generator according to claim 1, wherein the micro-antenna includes a plating layer which is made of copper, gold, or platinum or which includes sublayers made of these conductive metals.

4. (Currently Amended) The microplasma jet generator according to claim 3, wherein the thickness of the plating layer is at least two times greater than the depth (δ) below the surface of ~~a conductor~~ the conductive metal at which ~~a high frequency~~ the VHF electric current flows, the depth being represented by the following equation:

$$\delta=(2/(\omega\mu\sigma))^{1/2}$$

wherein σ represents the conductivity ~~of a~~ of the metal, μ represents the magnetic permeability thereof, and ω represents the angular frequency of the high-frequency current.

5. (Original) The microplasma jet generator according to claim 1, wherein the substrate is made of one selected from the group consisting of alumina, sapphire, aluminum nitride, silicon nitride, boron nitride, and silicon carbide.

6. (Original) The microplasma jet generator according to claim 5, wherein the substrate is made of alumina.

7. (Currently Amended) The microplasma jet generator according to claim 1, ~~further comprising~~ wherein the VHF electric current is provided by a high voltage-generating unit.

8. (Withdrawn) A method for generating a microplasma jet, comprising introducing plasma gas into the microplasma jet generator according to claim 1 at a flow rate of 0.05 to 5 slm and applying a VHF wave to the micro-antenna.

9. (Withdrawn) A chemical microanalysis method comprising using the microplasma jet generator according to claim 1.

10. (Withdrawn) The chemical microanalysis method according to claim 9, further comprising using micro-capillary electrophoresis.

11. (Withdrawn) A method for processing or surface treatment, comprising using the microplasma jet generator according to claim 1.

12. (Withdrawn) The method according to claim 11, wherein the processing or the surface treatment is the cutting of a predetermined portion of a workpiece, etching, film deposition, cleaning, or hydrophilization.

13. (Withdrawn) The method according to claim 11, further comprising using a unit, located close to a microplasma jet source included in the microplasma jet generator, for introducing reactive gas.

14. (Withdrawn) The method according to claim 13, wherein the reactive gas is one selected from the group consisting of oxygen, nitrogen, air, carbon fluoride, and sulfur hexafluoride.

15. (New) The microplasma jet generator according to claim 1, wherein the alternating directions are up and down or back and forth with respect to an edge of the substrate.

16. (New) A microplasma jet generator, driven with a VHF power supply, for generating an inductively coupled microplasma jet, the microplasma jet generator comprising

a substrate, a micro-antenna disposed on the substrate, and a discharge tube located close to the micro-antenna, wherein the micro-antenna has a flat undulating shape with plural turns.

17. (New) The microplasma jet generator according to claim 16, wherein the plural turns extend up and down or back and forth with respect to an edge of the substrate.

18. (New) A microplasma jet generator, driven with a VHF power supply, for generating an inductively coupled microplasma jet, the microplasma jet generator comprising a substrate, a micro-antenna disposed on the substrate, and a discharge tube located close to the micro-antenna, wherein the micro-antenna has a flat meandering shape with plural turns,

wherein the substrate is made of one selected from the group consisting of sapphire, aluminum nitride, silicon nitride, boron nitride, and silicon carbide.

19. (New) The microplasma jet generator according to claim 18, wherein the plural turns extend up and down or back and forth with respect to an edge of the substrate.